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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/986,965

11/13/2001

Chinari Tanaka

P21345

6398

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7590

07/12/2004

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EXAMINER

VO, TUNG T

ART UNIT

PAPER NUMBER

2613

DATE MAILED: 07/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/986,965

Applicant(s)

TANAKA, CHINARI

Examiner

Tung T. Vo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,6 and 7 is/are rejected.
- 7) ☒ Claim(s) 3 and 5 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2, 4, and 6-7 rejected under 35 U.S.C. 103(a) as being unpatentable over Kudo et al. (US 5,836,869) in view of Takahashi et al. (US 5,871,439).

Re claim 1, Kudo teaches an image search device (fig. 10 A) comprising:

a first image pickup optical system (126 of fig. 10A);

a first image pickup device (125b of fig. 10A) which picks up an image of a predetermined visual field formed through said first image pickup optical system to output a first image signal representing the picked up image;

a second image pickup optical system (124 of fig. 10A) including at least one lens which forms an image of at least a part of the predetermined visual field;

a second image pickup device (125a of fig. 10A) which picks up the image formed through said second image pickup optical system to output a second image signal representing the picked up image;

a shift unit (123 and 124 of fig. 10A) which shifts an area to be picked up by said second image pickup device through said second image pickup optical system within the predetermined

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visual field by shifting an optical axis of the lens in said second image pickup optical system relative to said second image pickup device;

an image synthesizing unit (131 of fig. 9, see also fig. 11) which adds an image signal representing a mark (tongs and tissue 115 of fig. 10A) showing the area corresponding to the image picked up by said second image pickup device to the first image signal (R2 of fig. 10B) based on an amount of the relative shift of said optical axis to said second image pickup device (123 and 124 of fig. 1);

a second display unit (132 of fig. 9) which displays the image represented by said second image signal (col. 21, lines 24-31), wherein the second display is able to display the image represented by said first image signal performed with said synthetic processing by said image synthesizing unit (col. 21, lines 25-31 and 60-65).

It is noted that Kudo does not particularly teach a first display unit which displays the image represented by said first image signal performed with said synthetic processing by said image synthesizing unit as claimed.

However, Takahashi et al. teaches a display unit (50A of fig. 1), a first display unit, for displaying the synthesized image that is performed by the synthesizing unit (50 of fig. 1, see col. 4, line 38-col. 5, line 63). Therefore, taking the combined teachings of Kudo and Takahashi as a whole, it would have been obvious to one of ordinary skill in the art to incorporate the display unit (50A of fig. 1) of Takahashi into the image search device (fig. 9) of Kudo the same purpose of displaying the synthesized image on the first display unit so that the operator/user to easily observe an appropriate area of an image frame the second display unit

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and entire image frame on the first display unit. Doing so would allow the imaging device capable of optimizing the image quality of the rigid endoscope.

Re claim 2, Kudo further teaches wherein said shift unit has an optical axis shifting member (123 of fig. 10A) which shifts the optical axis by moving in a plane perpendicular to the optical axis, and a moving unit (124 of fig. 10A) which moves the optical axis shifting member (the elements 123 and 124 are moving in the optical axis).

Re claim 4, Kudo further teaches wherein said first image pickup optical system and said second image pickup optical system share an objective optical system (104 of fig. 10A) including the lens (107 and 105 of fig. 10A) whose optical axis is shifted by said shift unit relative to said second image pickup device, and a separating optical member (120 of fig. 10A) which separates object light having passed through the objective optical system; and said second image pickup optical system has an image re-forming optical system (123 of fig. 10A) arranged rear of said separating optical member to relay at least a part of an image formed through said objective optical system.

Re claims 6 and 7, Kudo further teaches wherein said objective optical system is incorporated in an endoscope (101, 102 and 106 of fig. 10A); and that said objective optical system is incorporated in a surveillance camera as a design choice.

Allowable Subject Matter

3. Claims 3 and 5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Igarashi (US 6,402,685 B1) discloses a field conversion system for rigid endoscope.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung T. Vo whose telephone number is (703) 308-5874. The examiner can normally be reached on 6:30 AM - 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris. Kelley can be reached on (703) 305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Primary
TUNG T. VO
PATENT EXAMINER

T.Vo

Tung T. Vo
Primary Examiner
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